Figure 1

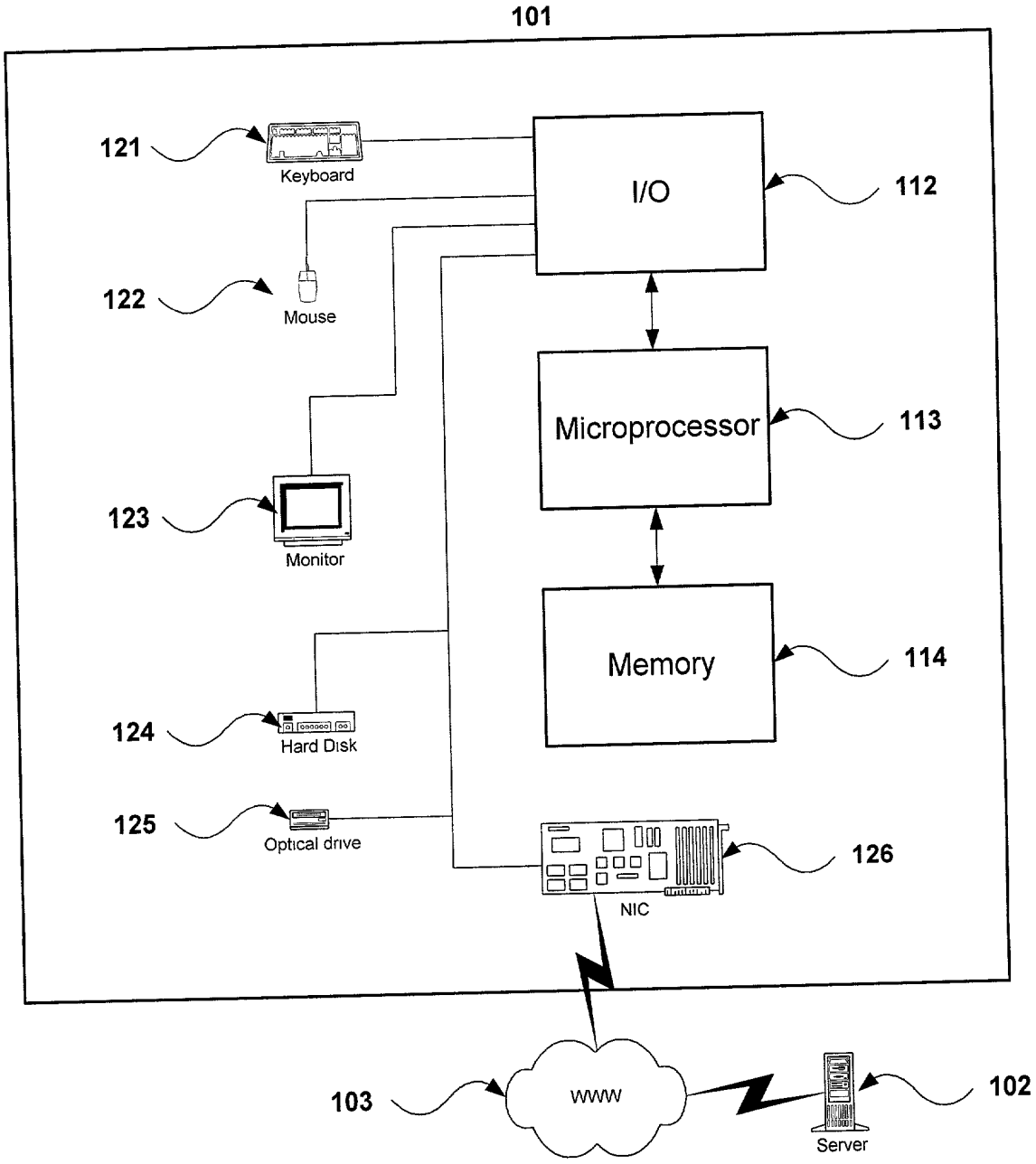

101
121
Keyboard
I/O
112
122
Mouse
Microprocessor
113
123
Monitor
Memory
114
124
Hard Disk
125
Optical drive
126
NIC
103
WWW
102
Server

Figure 2

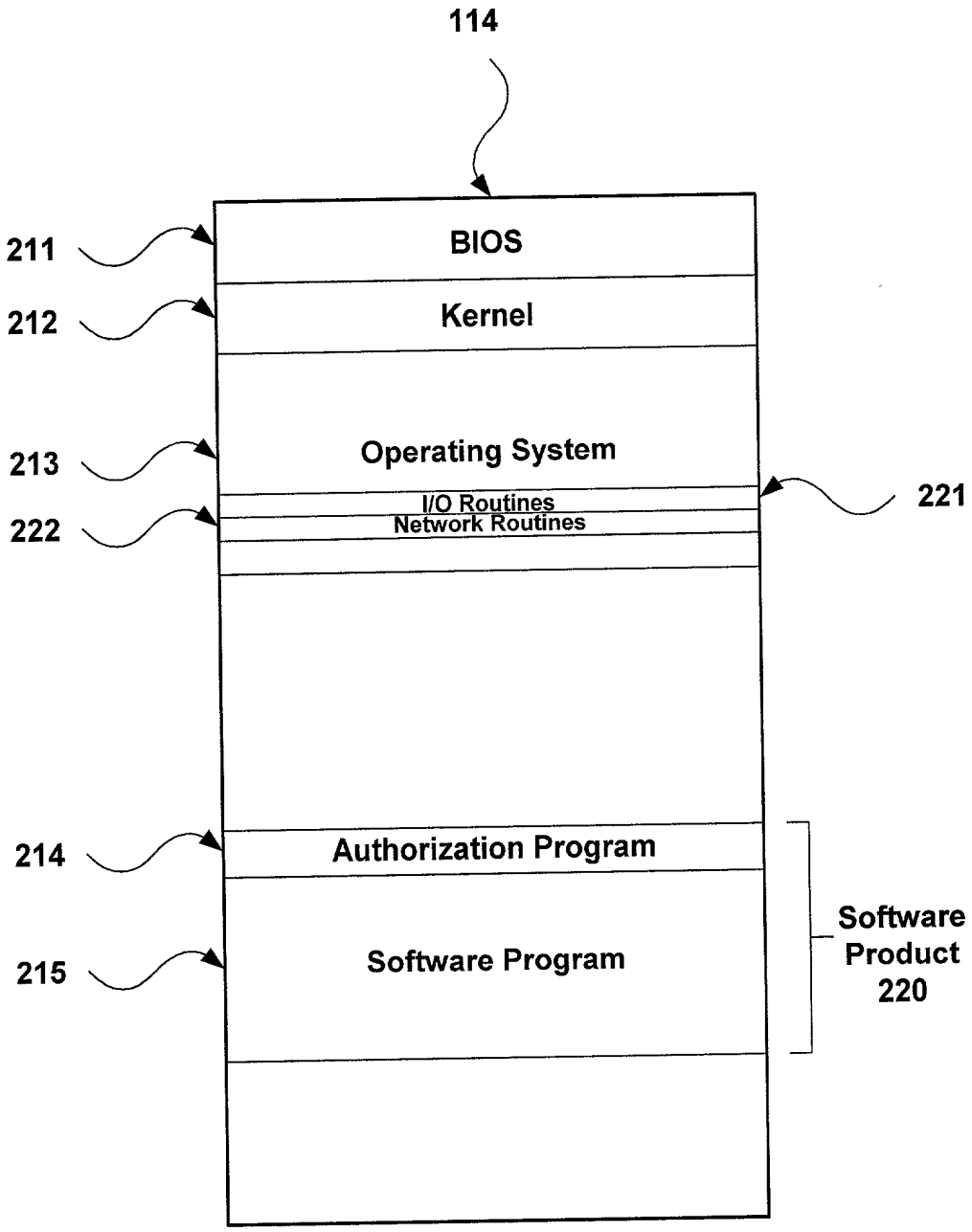

114
211
BIOS
212
Kernel
213
Operating System
221
I/O Routines
222
Network Routines
214
Authorization Program
215
Software Program
Software Product 220

Figure 3

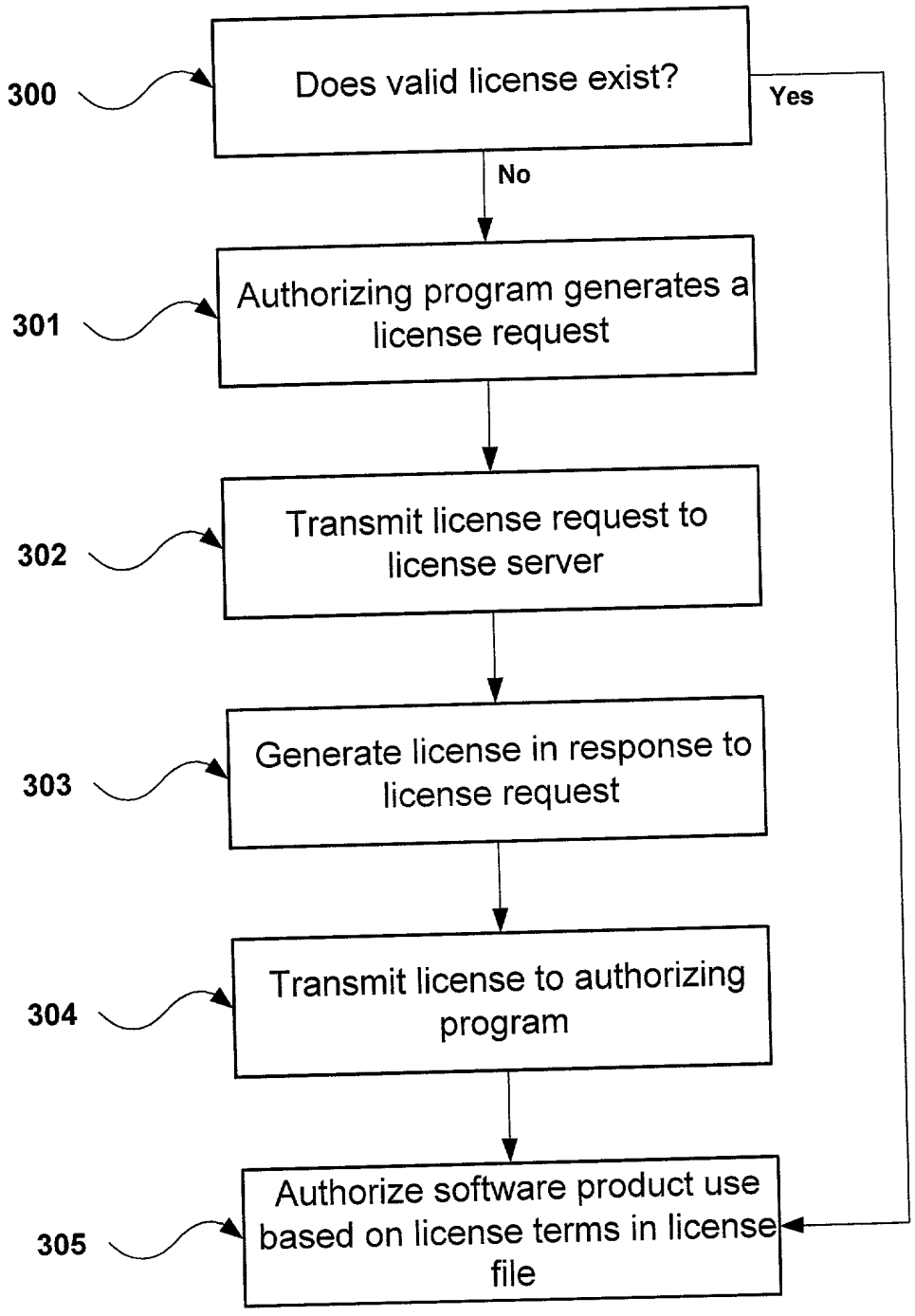

300
Does valid license exist?
Yes
No
301
Authorizing program generates a license request
302
Transmit license request to license server
303
Generate license in response to license request
304
Transmit license to authorizing program
305
Authorize software product use based on license terms in license file

Figure 4

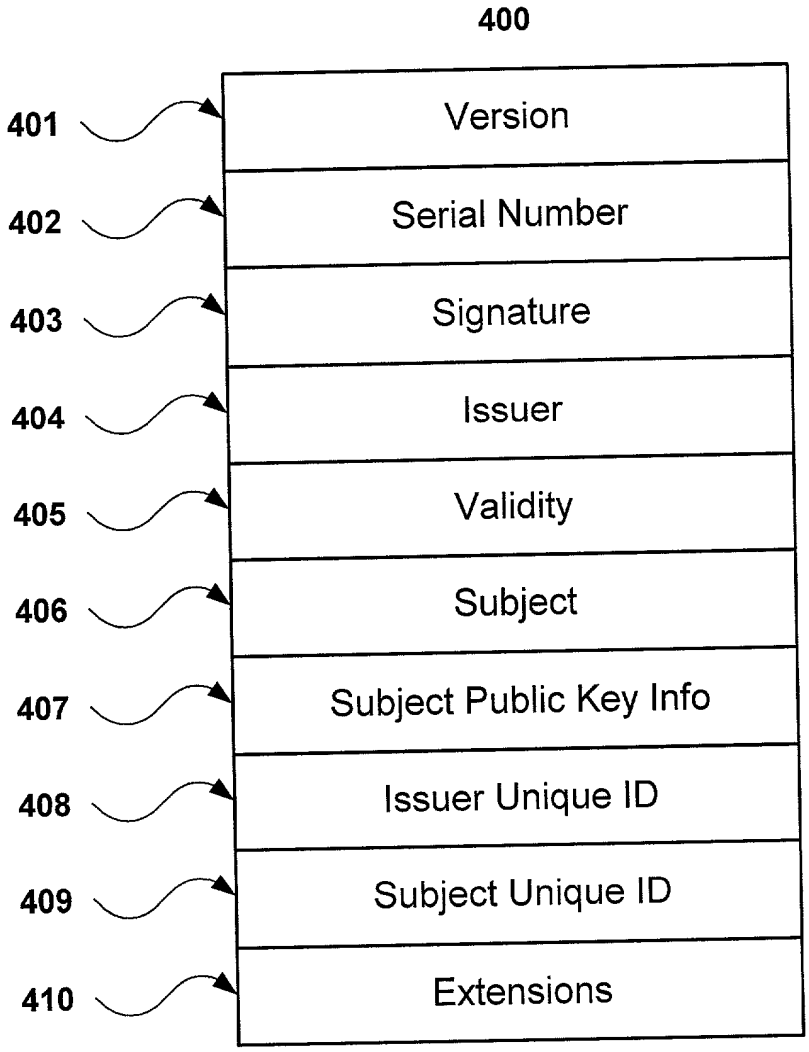

400
401
Version
402
Serial Number
403
Signature
404
Issuer
405
Validity
406
Subject
407
Subject Public Key Info
408
Issuer Unique ID
409
Subject Unique ID
410
Extensions

Figure 5

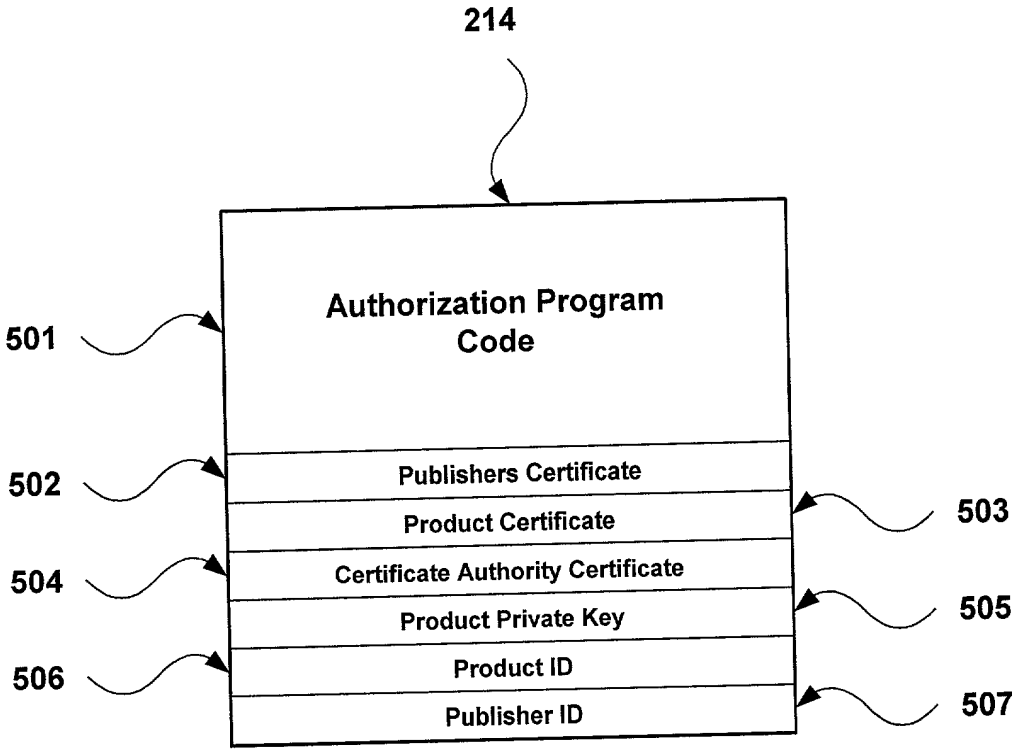

214
Authorization Program Code
501
Publishers Certificate
502
Product Certificate
503
Certificate Authority Certificate
504
Product Private Key
505
Product ID
506
Publisher ID
507

Figure 6

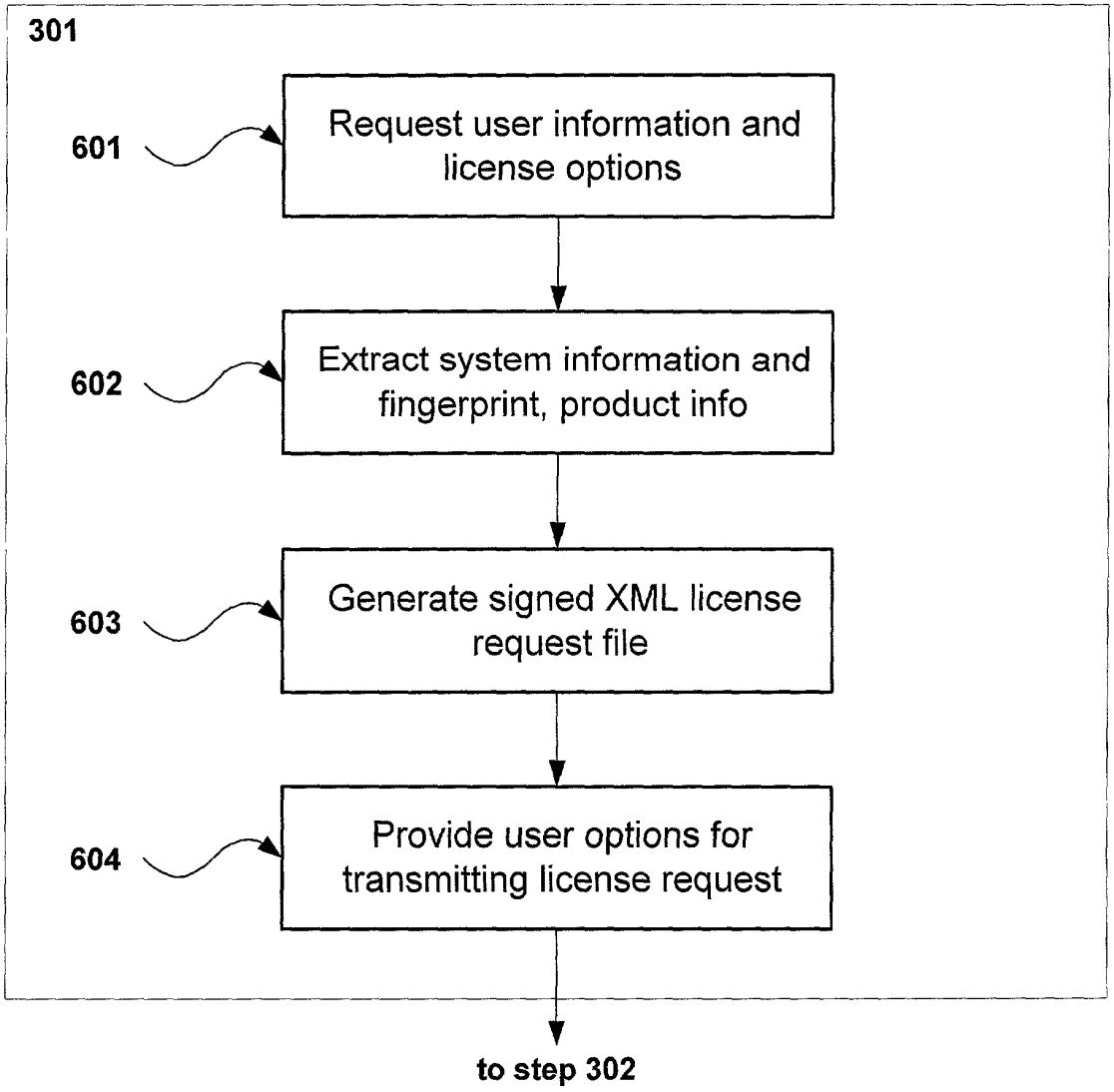

301
601
Request user information and license options
602
Extract system information and fingerprint, product info
603
Generate signed XML license request file
604
Provide user options for transmitting license request
to step 302

Figure 7

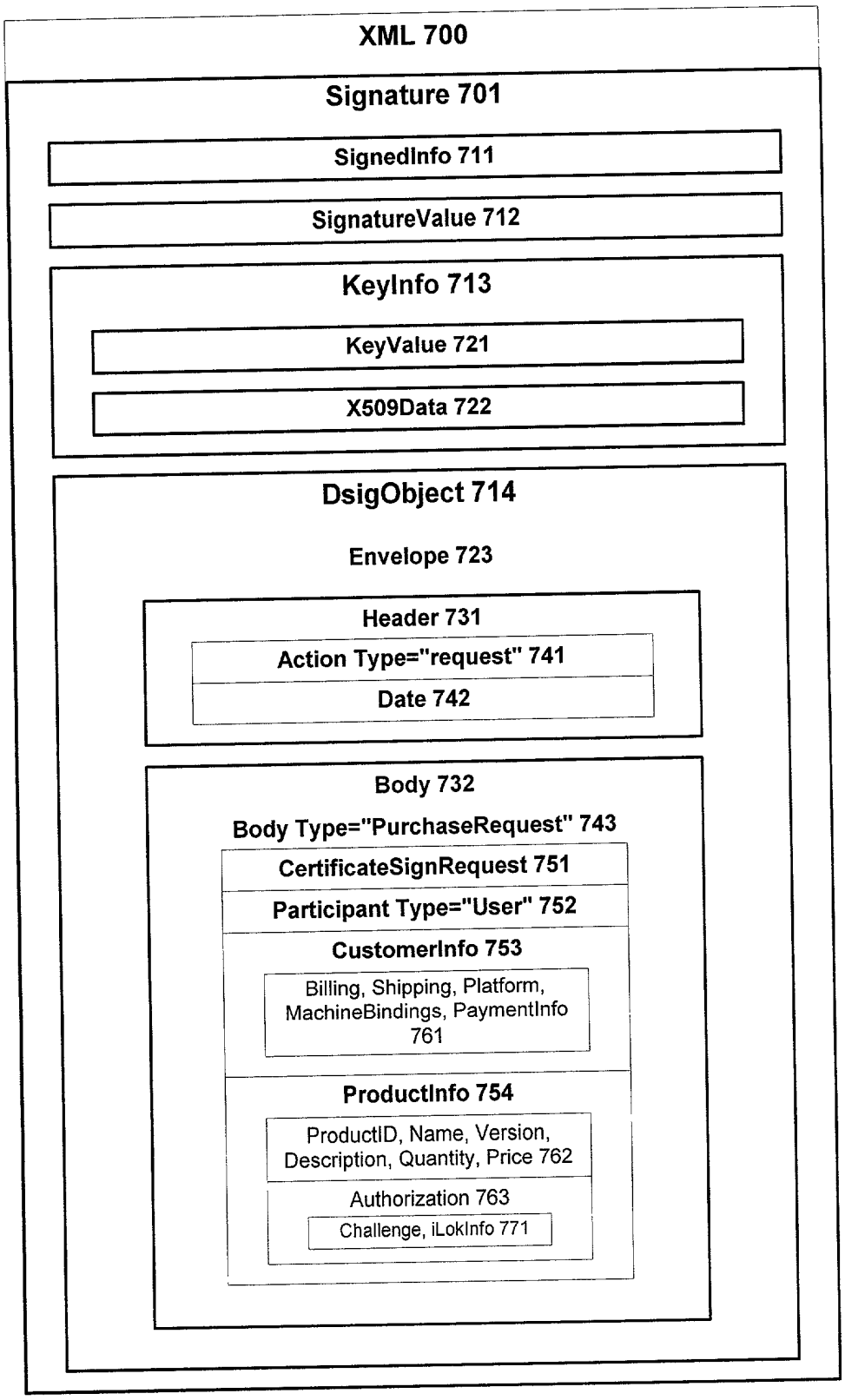

XML 700
Signature 701
SignedInfo 711
SignatureValue 712
KeyInfo 713
KeyValue 721
X509Data 722
DsigObject 714
Envelope 723
Header 731
Action Type="request" 741
Date 742
Body 732
Body Type="PurchaseRequest" 743
CertificateSignRequest 751
Participant Type="User" 752
CustomerInfo 753
Billing, Shipping, Platform, MachineBindings, PaymentInfo 761
ProductInfo 754
ProductID, Name, Version, Description, Quantity, Price 762
Authorization 763
Challenge, iLokInfo 771

Figure 8

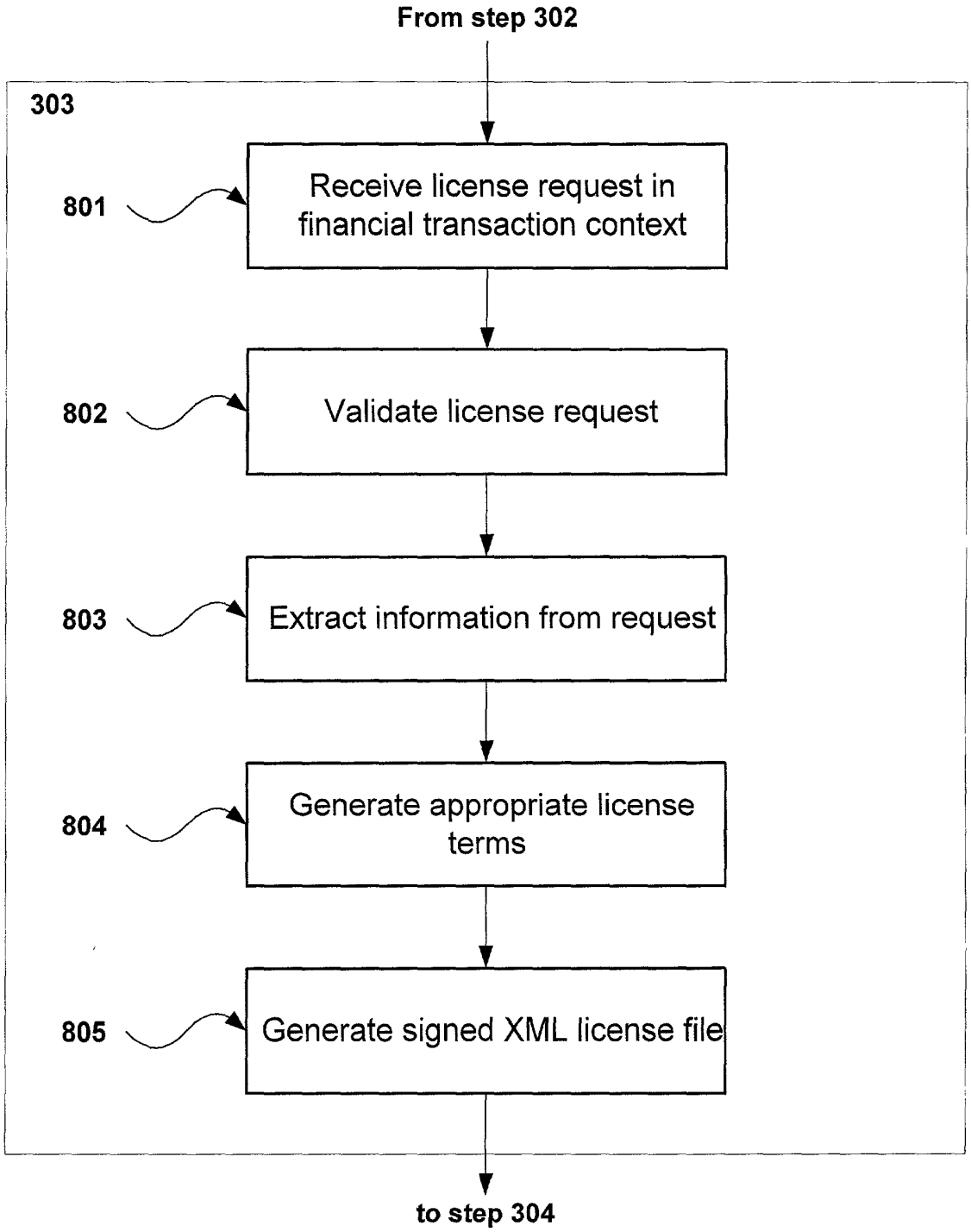

From step 302
303
801
Receive license request in financial transaction context
802
Validate license request
803
Extract information from request
804
Generate appropriate license terms
805
Generate signed XML license file
to step 304

Figure 9

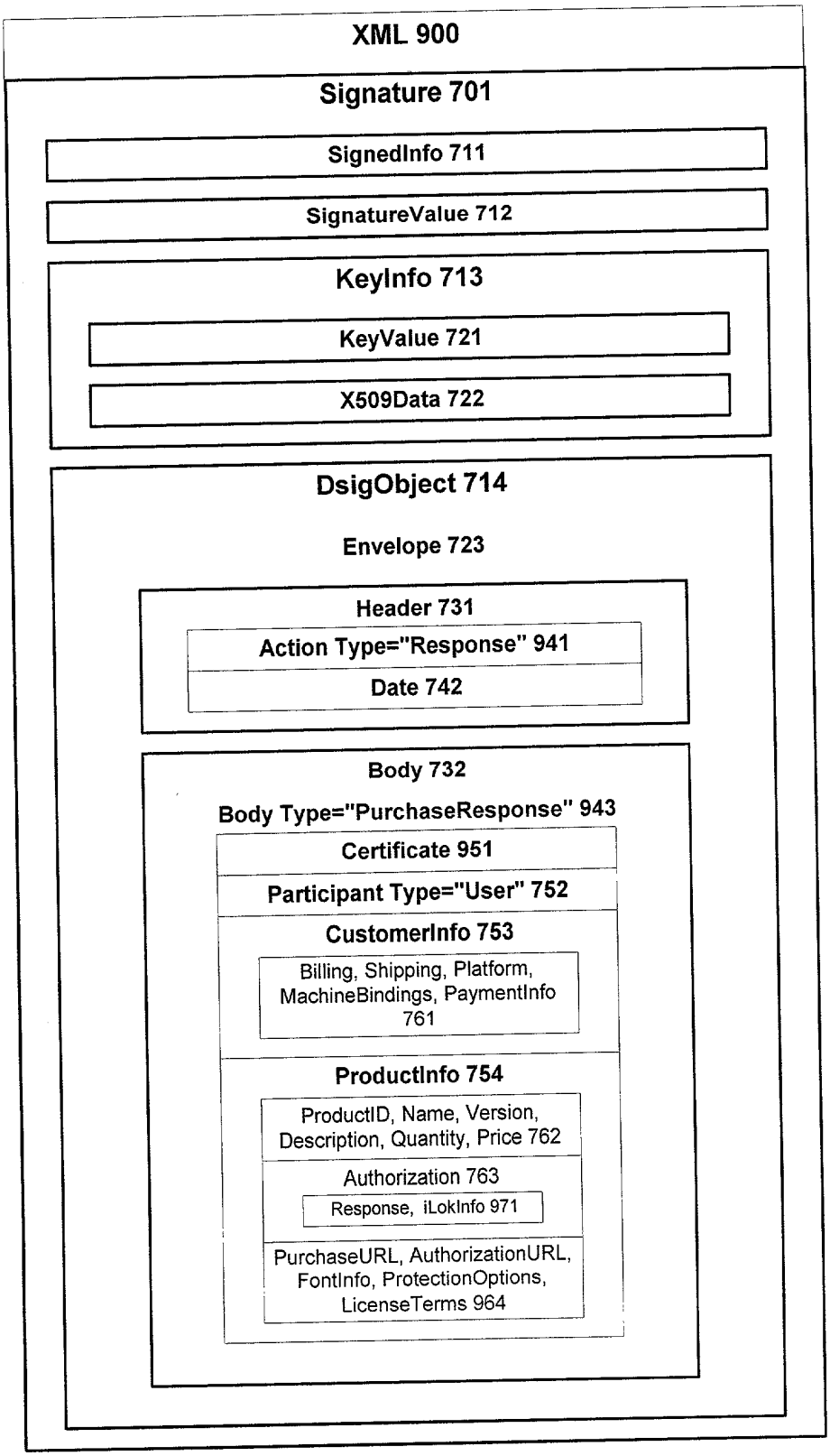
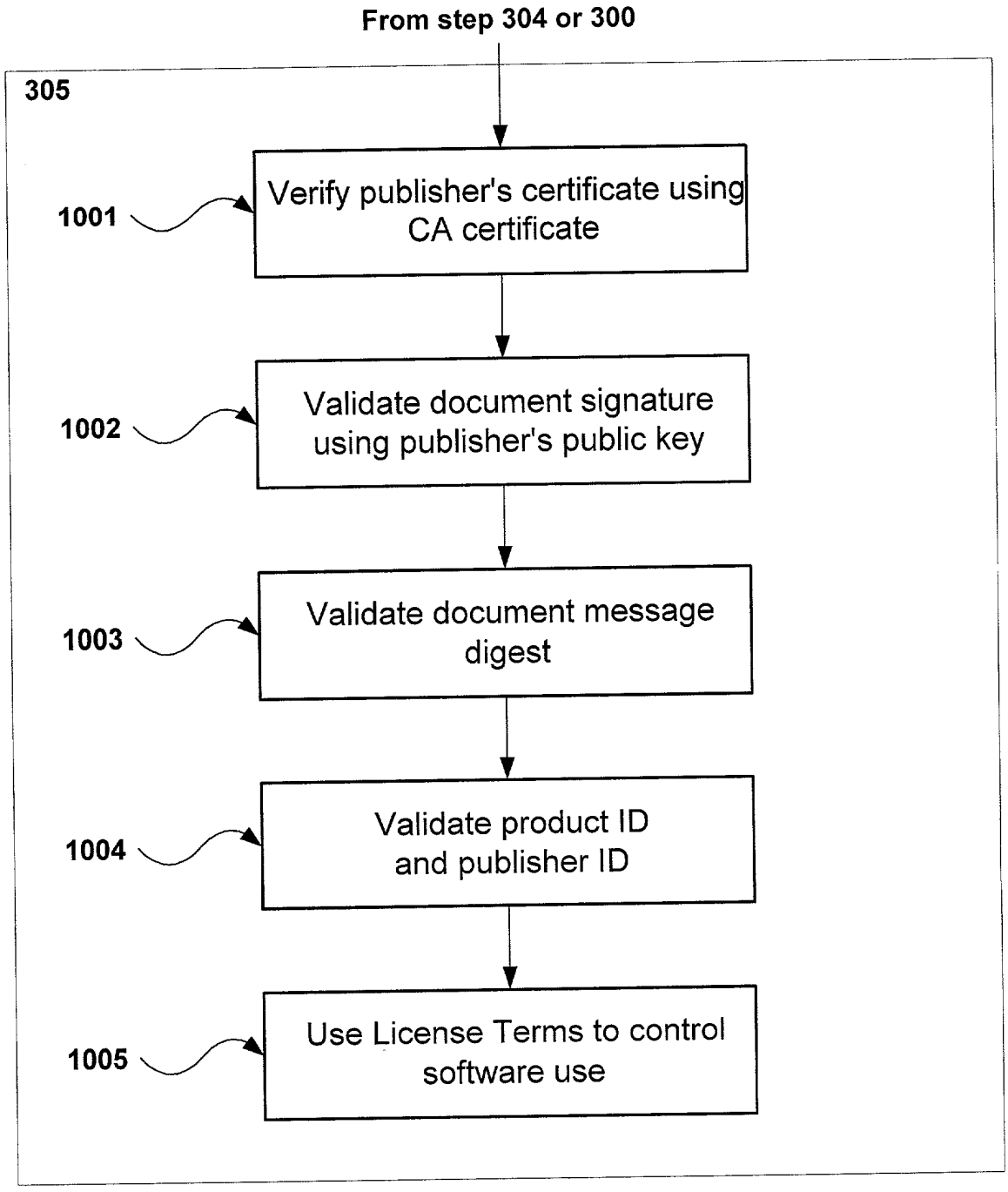

XML 900
Signature 701
SignedInfo 711
SignatureValue 712
KeyInfo 713
KeyValue 721
X509Data 722
DsigObject 714
Envelope 723
Header 731
Action Type="Response" 941
Date 742
Body 732
Body Type="PurchaseResponse" 943
Certificate 951
Participant Type="User" 752
CustomerInfo 753
Billing, Shipping, Platform, MachineBindings, PaymentInfo 761
ProductInfo 754
ProductID, Name, Version, Description, Quantity, Price 762
Authorization 763
Response, iLokInfo 971
PurchaseURL, AuthorizationURL, FontInfo, ProtectionOptions, LicenseTerms 964

Figure 10


From step 304 or 300
305
1001
Verify publisher's certificate using CA certificate
1002
Validate document signature using publisher's public key
1003
Validate document message digest
1004
Validate product ID and publisher ID
1005
Use License Terms to control software use